

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LARRY J. WINGET, DARIUS J. PREISLER and JASON T. MURAR

Appeal No. 2005-1549
Application No. 10/193,407

ON BRIEF

Before GARRIS, PAK and WARREN, **Administrative Patent Judges**.
PAK, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 11 through 23, which are all of the claims pending in the above-identified application.

APPEALED SUBJECT MATTER

Claims 11, 13, 18 and 21 are representative of the subject matter on appeal and read as follows¹:

11. A method of manufacturing a molded plastic component, comprising:

providing a film sheet having top and bottom surfaces, the film sheet being selected from the group consisting of polyester, polyurethane and polycarbonate;

vacuum molding the film sheet in a mold cavity to obtain a pre-form;

placing the pre-form in a mold cavity of an injection mold having a shape defining the desired plastic component; and

injecting a thermoplastic elastomer into the mold cavity of the injection mold to generate a structural carrier for the pre-form, the generation of the structural carrier creating sufficient pressure and heat to bond the structural carrier to the bottom surface of the pre-form to form the molded laminate plastic component.

13. The method of claim 11, wherein the step of injecting a thermoplastic elastomer into the mold cavity occurs at a temperature of 420°F and at a pressure of 50 psi to 15,000 psi.

18. A method of manufacturing a molded laminate automotive component, comprising:

inserting a film sheet into a vacuum forming station to form the film sheet into a predetermined automotive component shape to create a formed film sheet having top and

¹ We limit our consideration to only those claims which have been separately argued in the Brief in accordance with 37 CFR § 41.37(c)(1)(vii)(2004).

bottom surfaces, the film sheet being selected from the group consisting of polyester, polyurethane and polycarbonate;

placing the formed film sheet in a mold cavity of an injection mold having a shape defining the automotive component;

injecting a thermoplastic elastomer into the mold cavity of the injection mold, such that the thermoplastic elastomer is in mating contact with the bottom surface of the formed film sheet, to generate a structural carrier for the formed film sheet, the generation of the structural carrier creating sufficient pressure and heat to bond the structural carrier to the bottom surface of the formed film sheet to form the molded laminate automotive component.

21. A method of manufacturing a molded plastic component, comprising:

providing a film sheet having top and bottom surfaces, the film sheet being selected from the group consisting of polyester, polyurethane and polycarbonate;

vacuum molding the film sheet in a mold cavity to obtain a pre-form;

placing the pre-form in a mold cavity of an injection mold having a shape defining the desired plastic component; and

injecting a thermoplastic elastomer into the mold cavity of the injection mold to generate a structural carrier for the pre-form the generation of the structural carrier creating sufficient pressure and heat to bond the structural carrier to the bottom surface of the pre-form to form the molded laminate plastic component, wherein the film sheet comprises a layer of acrylic color.

PRIOR ART REFERENCE

The sole prior art reference relied upon by the examiner is:

Enlow et al. (Enlow)	5,490,893	Feb. 13, 1996
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THE REJECTIONS

The appealed claims stand rejected as follows²:

- 1) Claims 11, 12, 14, 18 and 21 under 35 U.S.C. § 102(b) as anticipated by the disclosure of Enlow; and
- 2) Claims 13, 15 through 17, 19, 20, 22 and 23 under 35 U.S.C. § 103(a) as unpatentable over the disclosure of Enlow.

OPINION

We have carefully reviewed the claims, specification and prior art, including all of the evidence and arguments advanced by both the examiner and the appellants in support of their respective positions. This review has led us to conclude that the examiner's Sections 102(b) and 103(a) rejections are well founded. Accordingly, we will sustain the examiner's Sections 102(b) and 103(a) rejections for essentially those findings of fact and conclusions set forth in the Answer. We add the following primarily for emphasis and completeness.

² See the Answer, pages 3-5 and the Brief, page 5.

Under Section 102, "anticipation" is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. **See *In re Spada***, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990); ***RCA Corp. v. Applied Digital Data Sys., Inc.***, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), ***cert. dismissed***, 468 U.S. 1228 (1984). In other words, anticipation requires that the claims on appeal "read on" something disclosed in the prior art reference. **See *Kalman v. Kimberly-Clark Corp.***, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983).

With the above precedents in mind, we turn first to the examiner's rejection of claims 11, 12, 14, 18 and 21 under 35 U.S.C. § 102(b) as anticipated by the disclosure of Enlow. According to the examiner (Answer, page 3), Enlow teaches each and every aspect of the claimed method. The appellants traverse, arguing only that Enlow does not teach (1) the claimed plastic film sheet, (2) the claimed vacuum molding in a mold cavity (3) the claimed injection of a thermoplastic elastomer into a mold cavity and (4) the claimed acrylic color layer. See the Brief, pages 5-8. We are not persuaded by these arguments for the reasons set forth below in ***seriatim***.

First, as acknowledged by the appellants (Brief, page 6), Enlow teaches employing a face sheet used for manufacturing plastic parts for an automobile. We find that the face sheet employed in Enlow is "a semirigid, self-supporting, thin, flat sheet" made of preferably polyesters. See column 12, lines 48-53, and column 13, lines 15-37. In other words, Enlow's thin face sheet is made of the same material as that of the claimed plastic film sheet. Compare claims 11, 18 and 21 with column 13, lines 15-37. Thus, we observe no distinction between Enlow's face sheet and the claimed plastic film sheet.

In making this observation, we note the appellants' arguments relating to the treatment (lamination and heating) and the thickness of Enlow's face sheet at pages 6 and 8 of the Brief. These arguments are not convincing since they are not relevant to the claims on appeal. For example, claims 11, 18 and 21, by virtue of using the transitional term "comprising," do not preclude the claimed plastic film sheet from being subjected to additional treatments, such as lamination and preheating. **See In re Baxter**, 656 F.2d 679, 686-87, 210 USPQ 795, 802-03 (CCPA 1981)("As long as one of the monomers in the reaction is propylene, any other monomer may be present, because the term 'comprises' permits the *inclusion* of other steps, elements, or

materials"). Nor do claims 11, 18 and 21 recite any limitation restricting the thickness of the claimed plastic film sheet. **In re Self**, 671 F.2d 1344, 1348, 213 USPQ 1, 5 (CCPA 1982) ("Many of appellant's arguments fail from the outset because, as the solicitor has pointed out, they are not based on limitations appearing in the claims").

Second, we find that Enlow teaches employing either a male vacuum former or a female vacuum mold to vacuum-form the laminated face sheet to a desired shape. See column 14, lines 41-61. As correctly found by the examiner (Answer, page 6), Enlow's shaping of the laminated face sheet in a female vacuum mold corresponds to the claimed vacuum molding of the film sheet **in** a mold cavity. We find nothing in the record, which would distinguish the claimed vacuum-molding **in** a mold cavity over Enlow's vacuum-shaping in a female mold. See, e.g., the Brief and the Reply Brief in their entirety.

Third, as correctly found by the examiner (Answer, pages 3 and 6), Enlow teaches injecting a thermoplastic elastomer into the mold cavity. See also column 15, lines 24-44 and column 16, lines 1-16. The appellants acknowledge that the claimed thermoplastic elastomer embraces the thermoplastic polyolefins

described in Enlow. See the appellants' own claim 12.

Finally, as also correctly found by the examiner (Answer, page 6), Enlow exemplifies using a conductive coating containing acrylic polymer and a pigment. See column 21, Example 12. In other words, Enlow teaches employing a layer of the claimed acrylic color as required by claim 21.

Thus, on this record, we concur with the examiner that Enlow anticipates the subject matter defined by claims 11, 12, 14, 18 and 21 within the meaning of 35 U.S.C. § 102(b).

Under Section 103(a), the obviousness of an invention cannot be established by combining the teachings of the prior art absent some teaching, suggestion or incentive supporting the combination. **ACS Hosp. Sys., Inc. v. Montefiore Hosp.**, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). This does not mean that the cited prior art must specifically suggest making the combination. **B.F. Goodrich Co. v. Aircraft Braking Sys. Corp.**, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996); **In re Nilssen**, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988). Rather, the test for obviousness is what the combined teachings of the prior art reference would have suggested to those of ordinary skill in the art. **In re Young**,

927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); **In re Keller**, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). This test requires us to take into account not only the specific teachings of the prior art reference, but also any inferences which one skilled in the art would reasonably be expected to draw therefrom. **In re Preda**, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

With these precedents in mind, we turn next to the examiner's rejection of claims 13, 15 through 17, 19, 20, 22 and 23 under 35 U.S.C. § 103(a) as unpatentable over the disclosure of Enlow. We note that the appellants do not dispute the examiner's determination that the limitations recited in claims 13, 15 through 17, 19, 20, 22 and 23 (e.g., molding temperature and pressure, and flexural modulus and hardness of plastic parts for automobiles) are well within the ambit of one of ordinary skill in the art.³ The appellants only argue that Enlow would not have suggested (1) the claimed plastic film sheet, (2) the claimed vacuum molding in a mold cavity and (3) the claimed

³ It appears to be the examiner's position that the limitations recited in claims 13, 15 through 17, 19, 20, 22 and 23 are result effective variables. **In re Boesch**, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980)("[D]iscovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art").

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thermoplastic elastomer injected into a mold cavity. See the Brief, pages 8 and 9.

For the factual findings set forth in the Answer and above, we are not persuaded by the appellants' arguments. Thus, on this record, we concur with the examiner that Enlow would have suggested the subject matter defined by claims 13, 15 through 17, 19, 20, 22 and 23 within the meaning of 35 U.S.C. § 103.

CONCLUSION

In view of the foregoing, we affirm the examiner's decision rejecting claims 11, 12, 14, 18 and 21 under 35 U.S.C. § 102(b) and claims 13, 15 through 17, 19, 20, 22 and 23 under 35 U.S.C. § 103(a).

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TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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CHUNG K. PAK)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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CHARLES F. WARREN)	
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CKP:hh

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